



## DECLARATION OF ATTRIBUTION UNDER 37 CFR 1.132

I, Albert P. Grasso, being a joint inventor of the subject invention disclosed and claimed in U. S. Patent Application Serial Number 10/723,502 filed November 26, 2003, and also being a joint inventor of the invention disclosed and claimed in U. S. Patent 6,979,505 which was filed on June 9, 2003 and issued on Dec. 27, 2005, hereby declare the following to be true, complete and accurate:

That I am a joint inventor of the subject matter claimed in U. S. Patent Application Serial No. 10/ 723,502 filed November 26, 2003 (the subject application);

That I am also a joint inventor of the invention disclosed and claimed in U. S. Patent 6,979,505 which was filed on June 9, 2003 and issued on Dec. 27, 2005 (the reference patent);

That with respect to the disclosure in U. S. Patent 6,979,505 (the reference patent) of the "additional enhancement of that cleansing capability" by the provision of "one or more water injection devices, depicted as spray nozzles 70, typically at or near the inlet end of the WTD 118 for the inlet oxidant 38" (Col 8, lines 12 -19), I am the individual who conceived of that structure/feature/arrangement in the context of that disclosed and claimed invention;

That at the time(s) of invention of the subject matter of both the subject application and the reference patent, I was employed by UTC Fuel Cells LLC.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Albert P. Grasso

5/24/06

(date)



## DECLARATION UNDER 37 CFR 1.131

We, Albert P. Grasso and Bryan F. Dufner, being joint inventors with Benjamin Charles Nuttall, of the subject invention disclosed and claimed in U. S. Patent Application Serial Number 10/723, 502 filed Nov. 26, 2003 hereby declare the following to be true, complete and accurate with respect to the conception and reduction to practice of the subject invention in the U. S.:

That we are the inventors, with Benjamin Charles Nuttall, of the subject matter claimed in U. S. Patent Application Serial No. 10/723, 502 filed Nov. 26, 2003;

That each, and all, of the following acts, events, and documentation occurred in the United States of America;

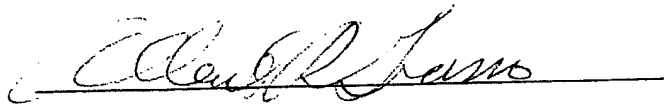
That at the time of the invention, we were employed by UTC Fuel Cells LLC;

That the subject invention was conceived before Dec. 21, 2001 (hereinafter "the critical date"), as evidenced by:

- The written invention disclosure designated **Exhibit A**, which invention disclosure was prepared, submitted to, and received by our Law Department before the critical date; and

That the written and pictorial description contained in the invention disclosure designated **Exhibit A** was sufficiently clear and complete at that time of submission to enable one of ordinary skill in the relevant art to practice the invention in at least its broadest sense without further testing and accordingly, may be viewed as an effective reduction to practice prior to the critical date with respect to at least the broadest aspects of the invention.

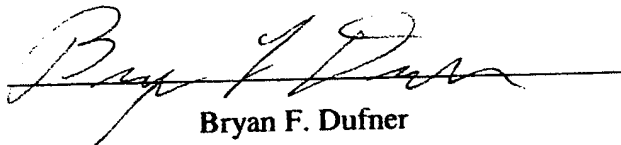
We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.



Albert P. Grasso

5/24/06

(date)



Bryan F. Dufner

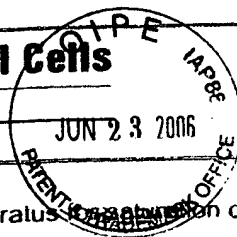
5/24/06

(date)

**International Fuel Cells**

A United Technologies Company

Invention Disclosure

Invention Disclosure Project No: C02725

**Disclosure Title:** Method and apparatus for preparation of fine pore graphite plates for use in an air humidification device in a fuel cell powerplant.

**EXHIBIT A****Date Conceived:** ###

**Job No.** (to which Inventor's time was charged when invention was conceived): 751601.6050, 751500.5411, 751030.4020

|  |  |                                       |  |
|--|--|---------------------------------------|--|
| <b>Date of first sketch:</b><br><u>###</u> | <b>Drawing No.</b><br>(if applicable): | <b>Date of first successful test:</b> | <b>Job No. used for first successful test:</b> |
|--|--|---------------------------------------|--|

**Identify Printed Materials Related to this Disclosure:**

**First disclosure of this invention prior to preparation of this Invention Disclosure was made to the following:**

|                             |                           |                         |
|-----------------------------|---------------------------|-------------------------|
| <b>1) Name 1:</b> Tom Clark | <b>Employee</b> (< click) | <b>Date:</b> <u>###</u> |
| <b>2) Name 2:</b>           | <b>Employee</b> (< click) | <b>Date:</b>            |
| <b>3) Name 3:</b>           | <b>Employee</b> (< click) | <b>Date:</b>            |

**Nature and date of first public disclosure of this invention:**

To whom/where: n/a

**Date:**

**The invention contributed to meeting the work statement requirements of Government/Customer**  
**Contract Number:** (if any) none

**Specific product(s) to which invention may apply:**

|  |
|--|
| <b>Product 1:</b> Energy Recovery Device (ERD) |
| <b>Product 2:</b>                              |
| <b>Product 3:</b>                              |
| <b>Product 4:</b>                              |
| <b>Product 5:</b>                              |

**Specific development to date:**  
none

**Planned future development:**  
further development and testing

|  |  |
|--|--|
| <b>First product sold (or offer of sale) incorporating this invention:</b> | <b>Date of first sale (or offer) incorporating this invention:</b> |
|--|--|

|  |                             |                  |
|--|-----------------------------|------------------|
| <b>Inventor Name(s):</b> (Full Name, Ex: Doe, John R.) | <b>Telephone Extension:</b> | <b>Mail Stop</b> |
| 1) Nuttall, Benjamin                                   | 2843                        | 610              |
| 2) Grasso, Al  | 2324                        | 610              |
| 3)   |                             |                  |
| 4)   |                             |                  |
| 5)   |                             |                  |
| 6)   |                             |                  |
| 7)   |                             |                  |
| 8)   |                             |                  |
| 9)   |                             |                  |

IFC proprietary information.

Page 1



10)

EXHIBIT A (cont.)

**Invention Description:** ( 3 Parts)**Define the Problem:**

During operation of a fuel cell powerplant incorporating the use of an Energy Recovery Device (ERD), dryout of fine pore graphite plates within the ERD tends to occur at hot and dry air inlet conditions. Dryout of these plates results in crossover of fuel cell exhaust into fuel cell inlet air stream.

**Problem Solution:**

A water nozzle or other water dispensing device is located near or at the Air inlet to the ERD. Air entering the ERD will transport water across the graphite plates to ensure pores within the graphite plate are kept full with water. Additional water not absorbed into the plates will humidify inlet air and be transported into inlet of fuel cell.

**Benefits of Invention over Prior Solutions:**

By preventing dryout of the graphite plates with the water nozzle, the ERD's operational temperature range is extended.

IFC Category: (click>) **Systems/Controls****Keywords:** (Check all that apply)

| Power Section                                | Fuel Processing                             | Systems/Controls                             | Other                                     |
|--|---|--|---|
| <input type="checkbox"/> Membrane            | <input type="checkbox"/> Reformer           | <input type="checkbox"/> Thermal management  | <input type="checkbox"/> Molten carbonate |
| <input type="checkbox"/> PEM                 | <input type="checkbox"/> Selective oxidizer | <input type="checkbox"/> Control             | <input type="checkbox"/> Phosphoric Acid  |
| <input type="checkbox"/> Ionomer             | <input type="checkbox"/> CO                 | <input checked="" type="checkbox"/> Humidity | <input type="checkbox"/> Solid oxide      |
| <input type="checkbox"/> Catalyst            | <input type="checkbox"/> Carbon             | <input type="checkbox"/> Reformate           | <input type="checkbox"/> Base cell        |
| <input type="checkbox"/> Catalyst support    | <input type="checkbox"/> Gasoline           | <input type="checkbox"/> Water management    |   |
| <input type="checkbox"/> Electrode           | <input type="checkbox"/> Sulfur             | <input checked="" type="checkbox"/> ERD      |   |
| <input type="checkbox"/> Cell                | <input type="checkbox"/> Shift converter    | <input type="checkbox"/> Deaerator           |   |
| <input type="checkbox"/> MEA                 | <input type="checkbox"/> Foam               | <input type="checkbox"/> Pressurized         |   |
| <input type="checkbox"/> Diffusion Layer     | <input type="checkbox"/> LTSC               | <input type="checkbox"/> Start up            |   |
| <input type="checkbox"/> Bilayer             | <input type="checkbox"/> Desulfurizer       | <input type="checkbox"/> Shutdown            |   |
| <input type="checkbox"/> Substrate           | <input type="checkbox"/> Autothermal        | <input type="checkbox"/> Enthalpy wheel      |   |
| <input type="checkbox"/> Flowfields          | <input type="checkbox"/> Methanol           | <input type="checkbox"/> Vehicle             |   |
| <input type="checkbox"/> Flow configurations | <input type="checkbox"/> Hydrocarbon        | <input type="checkbox"/> HEX                 |   |
| <input type="checkbox"/> Separator plate     | <input type="checkbox"/> Oxygenates         | <input type="checkbox"/> Air                 |   |
| <input type="checkbox"/> WTP                 | <input type="checkbox"/> ATR                | <input type="checkbox"/> Reactant            |   |
| <input type="checkbox"/> Coolers             | <input type="checkbox"/> Poison             | <input type="checkbox"/> CSA                 |   |
| <input type="checkbox"/> Coolants            | <input type="checkbox"/> Exhaust            | <input type="checkbox"/> Preheater           |   |
| <input type="checkbox"/> Antifreeze          | <input type="checkbox"/> Burner             | <input type="checkbox"/> Saturator           |   |
| <input type="checkbox"/> Manifolds           | <input type="checkbox"/> Scrubber           |  |   |
| <input type="checkbox"/> End plates          | <input type="checkbox"/> Design             |  |   |
| <input type="checkbox"/> Non-repeat hardware | <input type="checkbox"/> Ammonia            |  |   |
| <input type="checkbox"/> Pressure plates     | <input type="checkbox"/> Alumina            |  |   |
| <input type="checkbox"/> Corrosion           | <input type="checkbox"/> Vaporizer          |  |   |
| <input type="checkbox"/> Seals               | <input type="checkbox"/> Burner gas         |  |   |
| <input type="checkbox"/> Sealants            | <input type="checkbox"/> Adiabatic          |  |   |
| <input type="checkbox"/> Freeze              | <input type="checkbox"/> Carbon deposition  |  |   |
| <input type="checkbox"/> Shutdown            | <input type="checkbox"/> Mixer              |  |   |
| <input type="checkbox"/> Start up            | <input type="checkbox"/> Partial oxidation  |  |   |
| <input type="checkbox"/> Potential control   | <input type="checkbox"/> CPOX               |  |   |
| <input type="checkbox"/> Performance         | <input type="checkbox"/> POX                |  |   |
| <input type="checkbox"/> Performance decay   |   |  |   |



# International Fuel Cells

A United Technologies Company

Invention Disclosure

Invention Disclosure Project No: C 02725

- ☐ Electrolyte
- ☐ CSA
- ☐ Stack
- ☐ Edge Seal
- ☐ Graphite
- ☐ Fiber
- ☐ Nafion

EXHIBIT A (cont.)

## Inventor(s):

(for printed copy)

|                                   |                       |
|-----------------------------------|-----------------------|
| Signature: <u>Benjamin Muttas</u> | Date: <u>11/11/11</u> |
| Signature: <u>Cheryl L. Linn</u>  | Date: <u>11/11/11</u> |
| Signature: _____                  | Date: _____           |
| Signature: _____                  | Date: _____           |
| Signature: _____                  | Date: _____           |
| Signature: _____                  | Date: _____           |
| Signature: _____                  | Date: _____           |
| Signature: _____                  | Date: _____           |
| Signature: _____                  | Date: _____           |
| Signature: _____                  | Date: _____           |

## Explained to and understood by:

(for printed copy)

|                                   |                       |
|-----------------------------------|-----------------------|
| Signature: <u>Thomas J. Blunt</u> | Date: <u>11/11/11</u> |
| Signature: <u>Cheryl L. Linn</u>  | Date: <u>11/11/11</u> |



**International Fuel Cells**

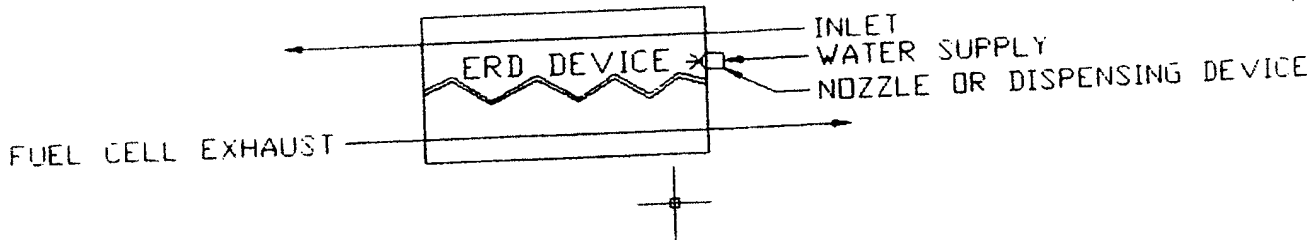
A United Technologies Company

Invention Disclosure

Invention Disclosure Project No: C02725

INSERT FIGURES HERE

*EXHIBIT A (cont.)*





DEC 9

C-3103

**UNITED STATES PATENT AND TRADEMARK OFFICE**

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND  
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

DECEMBER 04, 2003

PTAS



\*102477942A\*

UTC FUEL CELLS, LLC  
ROBERT H. KELLY  
MAIL STOP 601-03  
195 GOVERNOR'S HIGHWAY  
SOUTH WINDSOR, CT 06074

**UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT**

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 06/09/2003

REEL/FRAME: 014174/0438  
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
GRASSO, ALBERT P.

DOC DATE: 06/04/2003

ASSIGNOR:  
DUFNER, BRYAN F.

DOC DATE: 06/05/2003

ASSIGNOR:  
FILES, JAY C.

DOC DATE: 06/06/2003

ASSIGNOR:  
PRESTON, JR., JOHN L.

DOC DATE: 06/09/2003

ASSIGNEE:  
UTC FUEL CELLS, LLC  
195 GOVERNOR'S HIGHWAY  
SOUTH WINDSOR, CONNECTICUT 06074

SERIAL NUMBER: 10458706

FILING DATE: 06/09/2003

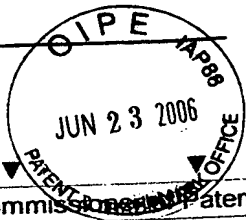


PATENT NUMBER:

ISSUE DATE:

014174/0438 PAGE 2

VIOLET MCCOY, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS



06-19-2003



102477942

Doc No.: C-3103 Page 1 of 1

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

Tab settings → → →

To the Honorable Commissioner of Patents

Attached original documents or copy thereof.

1. Name of conveying party(ies):

Albert P. Grasso;  
Bryan F. Dufner;  
Jay C. Files; and  
John L. Preston, Jr.

6-9-03

Additional names(s) of conveying party(ies)

☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment

☐ Merger

☐ Security Agreement

☐ Change of Name

☐ Other

Execution Date: June 4, 5, 6, and 9, 2003

2. Name and address of receiving party(ies):

Name: UTC Fuel Cells, LLC

Internal Address:

Street Address: 195 Governor's Highway

City: South Windsor State: CT ZIP: 06074

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent numbers(s):

10458706

If this document is being filed together with a new application, the execution date of the application is: 06/4,5,6,&9/2003

A. Patent Application No.(s)

B. Patent No.(s)

(C-3103) Method  
and Apparatus for  
Removal of  
Contamina

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Robert H. Kelly

Internal Address: UTC Fuel Cells, LLC

Mail Stop 601-03

Street Address: 195 Governor's Highway

City: South Windsor State: CT ZIP: 06074

6. Total number of applications and patents involved:

1

7. Total fee (37 CFR 3.41): \$ 40.00

☐ Enclosed - Any excess or insufficiency should be credited or debited to deposit account

☒ Authorized to be charged to deposit account

8. Deposit account number:

50-1307 (Order No. C-3103)

(Attach duplicate copy of this page if paying by deposit account)

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Stephen A. Schneeberger

Name of Person Signing

Signature

June 10, 2003

Date

Total number of pages including cover sheet, attachments, and document:

5

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

06/18/2003 6TOM11 00000019 501307 10458706

01 FC:8021

40.00 DA

ASSIGNMENT

WHEREAS, We, Albert P. Grasso of Vernon, Connecticut; Bryan F. Dufner of West Hartford, Connecticut, Jay C. Files of Windsor, Connecticut, and John L. Preston, Jr. of Hebron, Connecticut, have invented certain improvements in "Method and Apparatus for Removal of Contaminants from a Hydrogen Processor Feed Stream, as in a Fuel Cell Power Plant" identified as Attorney Docket No. C-3103, and described in a patent application executed by the undersigned on the date(s) set after the signature(s) hereto, being owner(s) of all right, title and interest in and to said application and in and to any invention described therein, free from all prior assignments, agreements, licenses, mortgages, or other encumbrances whatsoever, and having full right to convey the entire interest both legal and equitable herein assigned; and

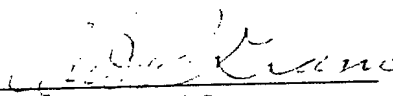
WHEREAS, UTC FUEL CELLS, LLC, of South Windsor, Connecticut, a limited liability company of the State of Delaware (assignee) is desirous of acquiring the entire right, title and interest in and to said invention or inventions and any and all patents to be obtained therefor;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged by the undersigned, the undersigned does (do) hereby sell, assign, transfer and set over unto said assignee, its successors and assigns, the entire right, title and interest in and to said invention or inventions, as described in the aforesaid application, in any form or embodiment thereof, and in and to the aforesaid application; and in and to any application filed in any foreign country based thereon, including the right to file said foreign applications under the provisions of the International Convention; also the entire right, title and interest in and to any and all patents or reissues or extensions thereof to be obtained in this or any foreign country upon said invention or inventions and any divisional, continuation, continuation-in-part or substitute applications which may be filed upon said invention or inventions in this or any foreign country; and the undersigned hereby authorize(s) and request(s) the issuing authority to issue any and all patents on said application or applications to said assignee or its successors and assigns.

The undersigned further agree(s), without any further payment or compensation by said assignee or its successors and assigns, to communicate to said assignee, its representatives or agents or its successors and assigns, any facts relating to said invention or inventions including evidence for interference purposes or for other legal proceedings whenever requested; testify in any interference or other legal proceedings, whenever requested; execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective; and generally do everything possible to aid said assignee, its successors or assigns and nominees to obtain and enforce proper patent protection for said invention or inventions in this or any foreign country.

IN TESTIMONY WHEREOF, the undersigned has(have) hereunto set his(their) hand(s) and seal(s) on the date after his(their) signature(s).

(L.S.)

  
ALBERT P. GRASSO

June 5, 2003

(L.S.) Bryan F. Dufner  
BRYAN F. DUFNER

June 9, 2003

(L.S.) Jay C. Files  
JAY C. FILES

June 6, 2003

(L.S.) John L. Preston, Jr.  
JOHN L. PRESTON, JR.

June 4, 2003

State of Connecticut  
County of Hartford

ss: South Windsor

On this 5<sup>th</sup> day of June, 2003 before me personally appeared  
ALBERT P. GRASSO to me personally known, and known to me to be the person(s) who signed  
the foregoing assignment, and acknowledged the signing of same as his(their) free act and deed.

Darlene S. Sutton  
Notary Public

**DARLENE S. SUTTON**  
**NOTARY PUBLIC**

My Commission Expires May 31, 2007

SEAL

State of Connecticut ss: South Windsor  
County of Hartford

On this 9<sup>th</sup> day of June, 2003 before me personally appeared  
BRYAN F. DUFNER to me personally known, and known to me to be the person(s) who signed  
the foregoing assignment, and acknowledged the signing of same as his(their) free act and deed.

Darlene S. Sutton  
Notary Public

**DARLENE S. SUTTON**  
**NOTARY PUBLIC**

My Commission Expires May 31, 2007

SEAL

State of Connecticut  
County of Hartford

ss: Scott Windsor

On this 6<sup>th</sup> day of June, 2003 before me personally appeared JAY C. FILES to me personally known, and known to me to be the person(s) who signed the foregoing assignment, and acknowledged the signing of same as his(their) free act and deed.

Darlene S. Sutton  
Notary Public

**DARLENE S. SUTTON**  
**NOTARY PUBLIC**

My Commission Expires May 31, 2007

SEAL

State of ~~Hart~~ Connecticut ss: Scott Windsor  
County of Hartford

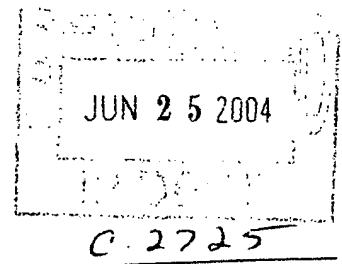
On this 4<sup>th</sup> day of June, 2003 before me personally appeared JOHN L. PRESTON, JR. to me personally known, and known to me to be the person(s) who signed the foregoing assignment, and acknowledged the signing of same as his(their) free act and deed.

Darlene S. Sutton  
Notary Public

**DARLENE S. SUTTON**  
**NOTARY PUBLIC**

My Commission Expires May 31, 2007

SEAL



**UNITED STATES PATENT AND TRADEMARK OFFICE**

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND  
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

JUNE 21, 2004

PTAS



\*102618189A\*

UTC FUEL CELLS, LLC  
ROBERT H. KELLY  
195 GOVERNOR'S HIGHWAY  
MAIL STOP 601-03  
SOUTH WINDSOR, CT 06074

**UNITED STATES PATENT AND TRADEMARK OFFICE  
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RECORDATION DATE: 11/26/2003

REEL/FRAME: 014755/0047  
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
NUTTALL, BENJAMIN CHARLES

DOC DATE: 11/18/2003

ASSIGNOR:  
DUFFNER, BRYAN F.

DOC DATE: 11/20/2003

ASSIGNOR:  
GRASSO, ALBERT P.

DOC DATE: 11/25/2003

ASSIGNEE:  
UTC FUELL CELLS, LLC  
195 GOVERNOR'S HIGHWAY  
SOUTH WINDSOR, CONNECTICUT 06074

014755/0047 PAGE 2

SERIAL NUMBER: 10723502

FILING DATE: 11/26/2003

PATENT NUMBER:

ISSUE DATE:

TITLE: METHOD AND APPARATUS FOR HUMIDIFICATION CONTROL OF AN ENERGY  
RECOVERY DEVICE IN A FUEL CELL POWER PLANT

VIOLET MCCOY, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

FORM PTO-1595 (Modified)  
(Rev. 03-01)  
OMB No. 0651-0027 (exp. 5/31/2002)  
P08/REV03

RE

12-09-2003

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

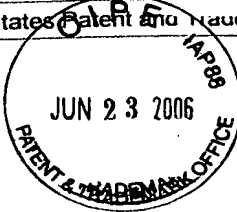


Tab settings

102618189

To the Director of the United States Patent and Trademark Office. Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):  
**Benjamin Charles Nuttall;  
Bryan F. Duffner; and  
Albert P. Grasso**



Additional names(s) of conveying party(ies)

☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other

Execution Date: **Nov. 18, 20, and 25, 2003**

2. Name and address of receiving party(ies):

Name: **UTC Fuel Cells, LLC**

Internal Address:

Street Address: **195 Governor's Highway**

City: **South Windsor** State: **CT** ZIP: **06074**

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent numbers(s): **10723502**

If this document is being filed together with a new application, the execution date of the application is: **Nov. 18, 20, and 25,**

A. Patent Application No.(s)

B. Patent No.(s)

(C-2725) Method  
and Apparatus for  
Humidification  
Contr

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: **Robert H. Kelly**

Internal Address: **UTC Fuel Cells, LLC**

**Mail Stop 601-03**

Street Address: **195 Governor's Highway**

City: **South Windsor** State: **CT** ZIP: **06074**

6. Total number of applications and patents involved: **1**

7. Total fee (37 CFR 3.41): \$ **40.00**

☐ Enclosed - Any excess or insufficiency should be credited or debited to deposit account

☒ Authorized to be charged to deposit account

8. Deposit account number:

**50-1307 (Order No. C-2725)**

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

**Stephen A. Schneeberger**

Name of Person Signing

Signature

**Nov. 26, 2003**

Date

Total number of pages including cover sheet, attachments, and document: **5**

Mail documents to be recorded with required cover sheet information to:  
Mail Stop Assignment Recordation Services

Director of the United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450

12/08/2003 6TOM11 00000069 501307 10723502

01 FC:8021 40.00 DA



ASSIGNMENT

WHEREAS, We, Benjamin Charles Nuttall of Bloomfield, Connecticut, Bryan F. Dufner of West Hartford, Connecticut, and Albert P. Grasso of Vernon, Connecticut, have invented certain improvements in "Method and Apparatus for Humidification Control of an Energy Recovery Device in a Fuel Cell Power Plant" identified as Attorney Docket No. C-2725, and described in a patent application executed by the undersigned on the date(s) set after the signature(s) hereto, being owner(s) of all right, title and interest in and to said application and in and to any invention described therein, free from all prior assignments, agreements, licenses, mortgages, or other encumbrances whatsoever, and having full right to convey the entire interest both legal and equitable herein assigned; and

WHEREAS, UTC FUEL CELLS, LLC, of South Windsor, Connecticut, a limited liability company of the State of Delaware (assignee) is desirous of acquiring the entire right, title and interest in and to said invention or inventions and any and all patents to be obtained therefor;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged by the undersigned, the undersigned does (do) hereby sell, assign, transfer and set over unto said assignee, its successors and assigns, the entire right, title and interest in and to said invention or inventions, as described in the aforesaid application, in any form or embodiment thereof, and in and to the aforesaid application; and in and to any application filed in any foreign country based thereon, including the right to file said foreign applications under the provisions of the International Convention; also the entire right, title and interest in and to any and all patents or reissues or extensions thereof to be obtained in this or any foreign country upon said invention or inventions and any divisional, continuation, continuation-in-part or substitute applications which may be filed upon said invention or inventions in this or any foreign country; and the undersigned hereby authorize(s) and request(s) the issuing authority to issue any and all patents on said application or applications to said assignee or its successors and assigns.

The undersigned further agree(s), without any further payment or compensation by said assignee or its successors and assigns, to communicate to said assignee, its representatives or agents or its successors and assigns, any facts relating to said invention or inventions including evidence for interference purposes or for other legal proceedings whenever requested; testify in any interference or other legal proceedings, whenever requested; execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective; and generally do everything possible to aid said assignee, its successors or assigns and nominees to obtain and enforce proper patent protection for said invention or inventions in this or any foreign country.

IN TESTIMONY WHEREOF, the undersigned has(have) hereunto set his(their) hand(s) and seal(s) on the date after his(their) signature(s).

(L.S.) Benjamin Nuttall  
BENJAMIN CHARLES NUTTALL

November 18, 2003

(L.S.) Bryan F. Dufner  
BRYAN F. DUFNER

Nov. 20, 2003

(L.S.) Albert P. Grasso  
ALBERT P. GRASSO

Nov. 25, 2003

State of Connecticut  
County of Hartford

) ss: South Windsor

On this 18<sup>th</sup> day of November, 2003 before me personally appeared BENJAMIN CHARLES NUTTALL to me personally known, and known to me to be the person(s) who signed the foregoing assignment, and acknowledged the signing of same as his(their) free act and deed.

Darlene S. Sutton

Notary Public

**DARLENE S. SUTTON**  
**NOTARY PUBLIC**

SEAL

My Commission Expires May 31, 2007

State of Connecticut  
County of Hartford

) ss: South Windsor

On this 20<sup>th</sup> day of November, 2003 before me personally appeared BRYAN F. DUFNER to me personally known, and known to me to be the person(s) who signed the foregoing assignment, and acknowledged the signing of same as his(their) free act and deed.

Darlene S. Sutton

Notary Public

**DARLENE S. SUTTON**  
**NOTARY PUBLIC**

SEAL

My Commission Expires May 31, 2007

State of Connecticut  
County of Hartford

City: South Windsor

On this 25<sup>th</sup> day of November, 2003 before me personally appeared ALBERT P. GRASSO to me personally known, and known to me to be the person(s) who signed the foregoing assignment, and acknowledged the signing of same as his(their) free act and deed.

Darlene S. Sutton  
Notary Public

**DARLENE S. SUTTON**  
**NOTARY PUBLIC**  
My Commission Expires May 31, 2007

SEAL